

[Abstract]

[Object]

It is one object of the present invention to perform regional optimization while taking spatial continuity into account, and to provide higher-level spatial data mining.

[Constitution]

A region calculation method for introducing a two-dimensional association rule, extracted from a database, that includes spatial information, such as addresses, and for applying the two-dimensional association rule for a map, comprises the steps of: defining an objective function that is used to introduce the two-dimensional association rule and that does not include regional information for which an output request has been submitted; dividing a region on the map into pixel grids having a predetermined size to form buckets (S101); aggregating data available in the database for each bucket (S103); employing the objective function to calculate a region for the optimization of the objective function (S104); extracting entities, appearing on the map, that correspond to the obtained region (S106); and employing the extracted entities to output a region that is applied for the map.

[Selected Drawing] Fig. 2